

FBS10

Fluorescent Microscope Family

Lighting your way to better fluorescence images.



FBS10 Fluorescence Microscope Family Product Comparison

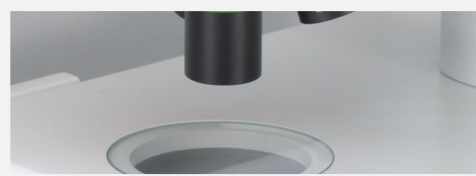


	FBS10 Standard	FBS10 LX	FBS10 DIC
Dimensions (WxHxD)	10.25" x 15.0" x 18.5" (260.35mmx381.0mmx469.9mm)	14.8" x 18.5" x 17.25" (375.92mm x 469.9mm x 438.15mm)	14.8" x 18.6" x 18.5" (375.92mm x 472.44mm x 469.9mm)
Magnification	10x—1000x	10x—1000x	10x—1000x
Head	Trinocular (100/100) (Trinocular 50/50 option available)	Trinocular (100/100) (Trinocular 50/50 option available)	Trinocular (100/100) (Trinocular 50/50 option available)
Eye Tube Inclination Angle / Inter-pupillary distance	30° / Adjustable (55 to 75mm)	30° / Adjustable (55 to 75mm)	30° / Adjustable (55 to 75mm)
Eyepieces (qty 2)	Included (10x)	Included (10x)	Included (10x)
<i>Pseudo stereo</i> technology	Included	Included	Included
Transmitted Light Source	None	Yes (LX Model LED Base)	Yes (Fiber Optic Light Delivery)
Fluorescence Light Source	External (sold separately)	External (sold separately)	External (sold separately)
Fluorescence System	Octo-Illuminator	Octo-Illuminator	Octo-Illuminator
Nose Piece	Quintuple (accepts up to 5 objectives)	Quintuple (accepts up to 5 objectives)	Quintuple (accepts up to 5 objectives)
Zoom/ Mag Changer	2x Mag Changer (Standard) 3 Position Flip Zoom upgrade Available (.5x → 1x → 2x)	2x Mag Changer (Standard) 3 Position Flip Zoom upgrade Available (.5x → 1x → 2x)	2x Mag Changer (Standard) 3 Position Flip Zoom upgrade Available (.5x → 1x → 2x)
DIC Prism Slider	No	No	Yes
Long Working Distance	Yes	Yes	Yes
UV Shield	Yes	Included	Included
Ergonomic Hand Rests	No	Included	Included
Base	Plate with Discovery Glass	LED Base with Discovery Glass	DIC Base System
Stage	No	No Optional Glide Stage	Glide Stage
Objectives	No Included (Choose from our wide selection!)	Not Included (Choose from our wide selection!)	Not Included (Choose from our wide selection!)
Filter Cubes	No Included (Chose from our Wide Selection!)	No Included (Chose from our Wide Selection!)	No Included (Chose from our Wide Selection!)
Foot Switch	No	Not included (upgrade available)	Not included (upgrade available)
Camera Adaptability	C mount for camera accessory available	C mount for camera accessory available	C mount for camera accessory available
ROHS Compliant	Yes	Yes	Yes
Made in the USA	Yes	Yes	Yes

FBS10 Fluorescence Microscope



The FBS10 features high numerical aperture optics on all magnifications meaning high light throughput, high resolution and bright colors on all levels of viewing. Superior light throughput than standard stereo systems!



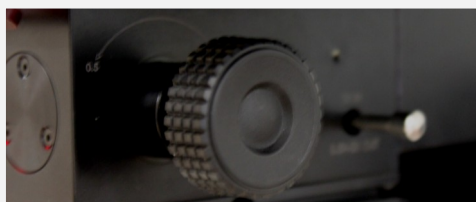
Kramer's high light throughput design allows for optimal images for both viewing and photographing (and video) for your documentation needs with no slide mounting necessary.



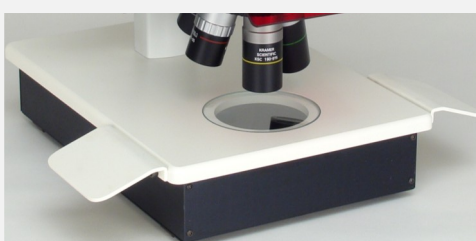
This hybrid system gives you *pseudo* stereo technology combine with long working distance objectives to view, tag, pick, and manipulate standard Petri dish/ agar environments.



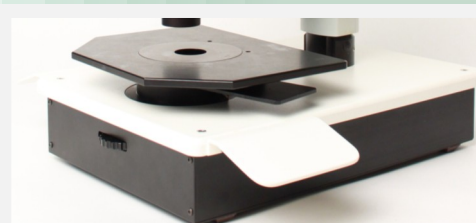
The fluorescence illuminator can hold up to 8 fluorescence filter cubes and the quick change design creates an ergonomically simple motion to change filters. The cubes are self-locating, making changing filters as simple as a swipe of your finger. Kramer Scientific offers a large number of filter sets to meet your tagging needs!



Optional Discrete Zoom - 2x / 1x / 0.5x allows for fast zoom change of .5x to 2x without the light loss associated with linear zoom tubes.



The proprietary LED transmission light base is sleek, self contained and requires only a small footprint in your lab. This system has bright white light, 10 levels of light, controllable by a knob, with no mechanical shutter and a low heat bulb that is easy to switch on and off. Kramer offers a footswitch accessory for hands free shutter light source control. The LED base also features ergonomic knobs and hand rests for long days in the lab. (LX Model Only)



DIC Transmitted Light Base with long working distance and high NA Condenser assures high contrast and resolution. This base allows the user to look through plastic Petri dishes, agar and water environments, and more with unsurpassed clarity, throughput and minimal halving. The DIC base boasts apertures that aid in wavelength modification for color clarity and a *glide stage* for minute sample manipulation throughout sample viewing and picking which also aids to avoid reflections from the condenser top glass element. (DIC Model Only)

Why the FBS10?

- ⇒ High Numerical Aperture (NA) objectives combined with an optimized light throughput design and negligible glass interference come together to maximize the samples fluorescence illumination to reveal never before viewable tags in a Petri dish environment. With no slide mounting necessary the FBS saves time and prevents contamination of your samples.
- ⇒ Optimal imaging for both viewing and photo documentation.
- ⇒ Long working distance objectives combined with *pseudo stereo* technology merge for ease of sample picking, sorting, tagging, and manipulation.
- ⇒ An optional discreet zoom feature allows for a quick flip from .5x to 2x magnification, like a linear zoom, for easy evaluation of your organism without having to change the focus of your instrument (optimal with live subjects!) keeping your specimen easily in field of view. When not needed, this feature can be disengaged and the zoom optics will be removed from the light path augmenting light throughput.
- ⇒ Kramer's patented fluorescence illuminator system gives high color fluorescence in an ergonomic setting. This illuminator system holds up to 8 fluorescence filter cubes that are self locating and change with a simple *swipe* of your finger! Kramer Scientific offers numerous filter set options from which to choose.
- ⇒ FBS10's user friendly LX system comes with a sleek, LED Transmitted Light base for low heat viewing of your subject while leaving a small footprint in your lab work-space.
- ⇒ Kramer's unique DIC system features cross section comparable viewing of your organism in plastic or glass dish settings.

The FBS10 Fluorescence Family of Microscopes is the culmination of compound and stereo technologies, emphasizing the optimal features in both while curtailing the compromises. This workhorse system can replace the need for multiple microscope systems in your lab, maximizing research efficiency and minimizing time spent moving, mounting and resenting your subject for each new setup needed.



Innovative Fluorescence Microscopy Solutions

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Making your visions possible.



FBS10 Fluorescence Microscope Systems



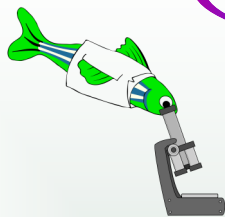
Part Number	FBS10 System	Description
KSC 410-1-100-0	FBS10 Standard	FBS10 Standard with Plate Base, 100/100 Trinocular Head and 2 Position zoom
KSC 410-1-100-1	FBS10 Standard	FBS10 Standard with Plate Base, 100/100 Trinocular Head and Flip zoom
KSC 410-1-50-0	FBS10 Standard	FBS10 Standard with Plate Base ,50/50 Trinocular Head and 2 Position zoom
KSC 410-1-50-1	FBS10 Standard	FBS10 Standard with Plate Base, 50/50 Trinocular and Flip Zoom
KSC 410-2-100-0	FBS10 LX	FBS10 LX with LED Transmitted Light Base, 100/100 Trinocular Head and 2 Position zoom
KSC 410-2-100-1	FBS10 LX	FBS10 LX with LED Transmitted Light Base, 100/100 Trinocular Head and Flip Zoom
KSC 410-2-50-0	FBS10 LX	FBS10 LX with LED Transmitted Light Base, 50/50 Trinocular Head and 2 Position zoom
KSC 410-2-50-1	FBS10 LX	FBS10 LX with LED Transmitted Light Base, 50/50 Trinocular Head and Flip Zoom
KSC 410-3-100-0	FBS10 DIC	FBS10 DIC with DIC Base and Prism system, 100/100 Trinocular Head and 2 Position Zoom
KSC 410-3-100-1	FBS10 DIC	FBS10 DIC with DIC Base and Prism system,100/100 Trinocular Head and Flip Zoom
KSC 410-3-50-0	FBS10 DIC	FBS10 DIC with DIC Base and Prism system,50/50 Trinocular Head and 2 Position Zoom
KSC 410-3-50-1	FBS10 DIC	FBS10 DIC with DIC Base and Prism system,50/50 Trinocular Head and Flip Zoom

Accessories

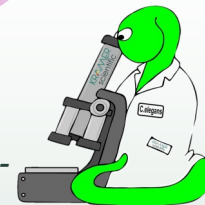
Objectives	KSC 410-002-LWD	2x Plan APO (LWD) Objective (0.055NA, 34mm WD)	All FBS10 Systems
	KSC 410-005-LWD	5x Plan APO (LWD) Objective (0.14NA, 34mm WD)	All FBS10 Systems
	KSC 410-010-LWD	10x Plan APO (LWD) Objective (0.3NA, 34mm WD)	All FBS10 Systems
	KSC 410-020-LWD	20x Plan APO (LWD) Objective (0.42NA, 20mm WD)	All FBS10 Systems
	KSC 410-050-LWD	50x Plan APO (LWD) Objective (0.55NA, 13mm WD)	All FBS10 Systems
	KSC 410-010-HR	10x High Res Objective (0.45NA, 19mm WD)	All FBS10 Systems
	KSC 410-020-HR	20x High Res Objective (0.60NA, 13mm WD)	All FBS10 Systems
Light Sources		Schott A20400 LED Light Source	FBS10 DIC
		Schott LED Light Source Cable	Schott A20400
		89 North Photofluor II with 3mm LLG	All FBS10 Systems (connects to the Octo)
Misc Access		Footswitch	FBS10LX and older DIC models
		Glide Stage	FBS10 LX (already on DIC)
Cubes		See next page for cube options	All FBS10 Systems

Filter Cube Options

Many more available upon request.



We offer over a vast number of specialized filter sets fitting exclusively into the Kramer Family of fluorescence illuminator products. We offer solutions for all fluorescence applications. See below for a selection of our more popular filter sets. Contact one of our sales specialists today.



Part Number	Description	Exciter	Dichroic	Emission	Set
KSC 410-811W	FITC WIDEBAND (515 EM)	D480/30X	Q505LP	E515LP	31001M
KSC 410-811N	FITC NARROWBAND	D480/30X	Q505LP	D535/40M	31001
KSC 410-813	GFP WIDEBAND	ET470/40X	T495LPXR	K500LP	49018
KSC 410-814	GFP NARROWBAND	ET470/40X	T495LPXR	ET525/50M	49002
KSC 410-815	RHODAMINE	D540/25X	Q565LP	D605/55M	31002
KSC 410-817W	BFP WIDEBAND	D390/22X	420DCLP	D430LP	31021 W/D430LP
KSC 410-817N	BFP NARROWBAND	D390/22X	420DCLP	D460/50M	31021
KSC 410-818	TEXAS RED	ET560/40X	T585LP	ET630/75M	49008
KSC 410-819	UV/VIOLET	D390/70X	440DCXR	E470LP	11011V2
KSC 410-820	DAPI	D405/10X	425DCLP	D460/50M	31047
KSC 410-821	CY5.5	HQ665/45X	Q695LP	HQ725/50M	41022
KSC 410-822	CY5	ET640/30X	T660LPXR	ET690/50M	49009
KSC 410-823	YFP	ET500/20X	T515LP	ET535/30M	49003
KSC 410-824	CFP	ET436/20X	T455LP	ET480/40M	49001
KSC 410-825	BETA LACTAMASE	HQ405/20X	425DCXR	HQ430LP	41031
KSC 410-832	FM143	D480/30X	505DCXT	E570LP	31030
KSC 410-833	EGFP	HQ480/40X	505DCXT	HQ510LP	41012
KSC 410-834	DSRED/RFP	ET545/25X	T565LPXR	ET605/70M	49004
KSC 410-839	Q.MUSTARD	D425/40X	460DCLP	D540/50M	31010
KSC 410-845	CY3 WIDEBAND	HQ535/50X	Q565LP	HQ610/75M	41002
KSC 410-846	CY3 NARROWBAND	HQ545/30X	Q570LP	HQ610/75M	41002B
KSC 410-847	RHODAMINE REDDER	HQ545/30X	Q570LP	HQ620/60M	41002C
KSC 410-849	CFP/YFP DUAL	51017X	51017BS	51017M	51017
KSC 410-851	GFP/RFP DUAL	51019X	51019BS	51019M	51019
KSC 410-852	YFP LP	HQ500/20X	Q515LP	HQ520LP	41029
KSC 410-858	UV	AT350/50X	400DCLP	E420LPV2	11000V3
KSC 410-861	AM CYAN 1	HQ440/40X	Q470LP	HQ500/40M	42001
KSC 410-862	ZS GREEN 1	HQ470/30X	Q495LP	HQ520/40M	42002
KSC 410-863	ZS YELLOW 1	HQ500/35X	Q525LP	HQ550/40M	42003
KSC 410-864	AS RED 2	HQ540/40X	Q570LP	HQ620/60M	42004
KSC 410-865	DS RED 2	HQ540/40X	Q570LP	HQ600/50M	42005
KSC 410-866	M CHERRY	HQ575/50X	Q610LP	HQ640/50M	41043
KSC 410-879	M TOMATO	HQ545/30X	Q570LP	HQ610/75M	41007A
KSC 410-882	QDOT	E460SPUVv2	475DCXRU	D605/40M	32007
KSC 410-883	EVITAG	E460SPUVv2	470DCXRU	D680/40M	32222
KSC 410-891	CFP/YFP/RFP	61008X	61008BS	61008M	61008
KSC 410-900	CHROMA DAPI	AT350/50X	400DCLP	D460/50M	31000V2
KSC 410-901	CHROMA FITC	HQ480/40X	Q505LP	HQ535/50M	41001
KSC 410-902	CHROMA TEXAS RED	HQ560/55X	Q595LP	HQ645/75M	41004
KSC 410-903	GFP VERY NARROWBAND	HQ480/20X	Q495LP	HQ510/20M	41020

